

(12) UK Patent Application (19) GB (11) 2 159 425 A

(43) Application published 4 Dec 1985

(21) Application No 8414124

(22) Date of filing 2 Jun 1984

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(51) INT CL<sup>4</sup>  
A63H 3/52

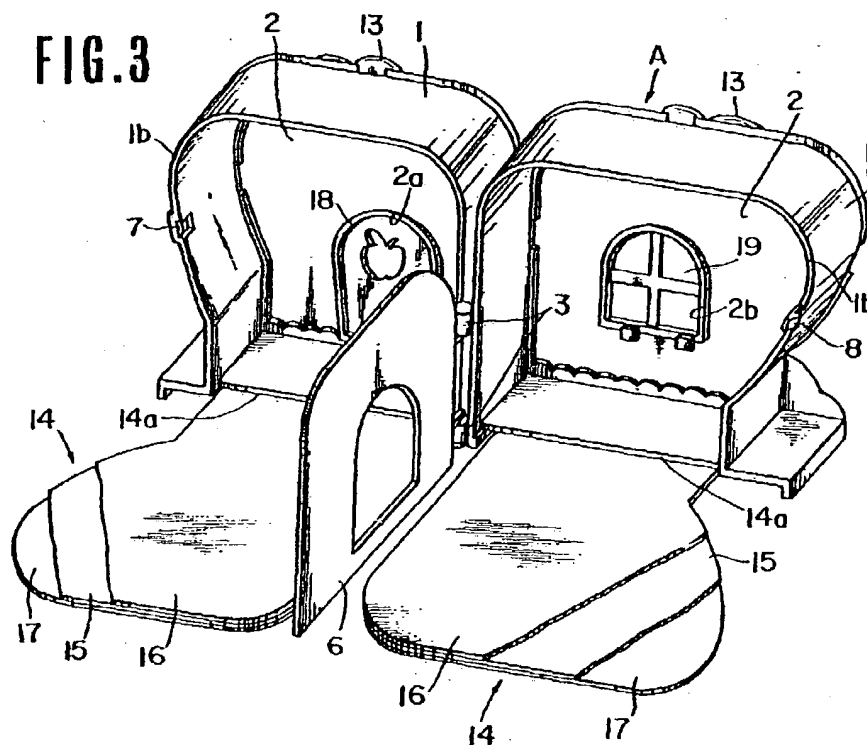
(52) Domestic classification  
A6S 3B 4

(56) Documents cited  
GB 1529100

(58) Field of search  
A6S

(54) Toy house

(57) A toy house comprises two frame members (1) connected to each other so as to be opened into a developed position for use and closed when the toy is not in use, decorative panels (2) each attached to the respective frame members to provide the outer face of the toy when the frame members are closed and to provide walls of rooms formed inside of the respective frame members, and floor members (14) fixed at the respective base portions to the corresponding bottoms of the frame members and foldable upwardly into the respective frame members when the frame members are closed and extendable to provide floors for the rooms formed by the respective frame members when the frame members are opened.



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FIG. 1

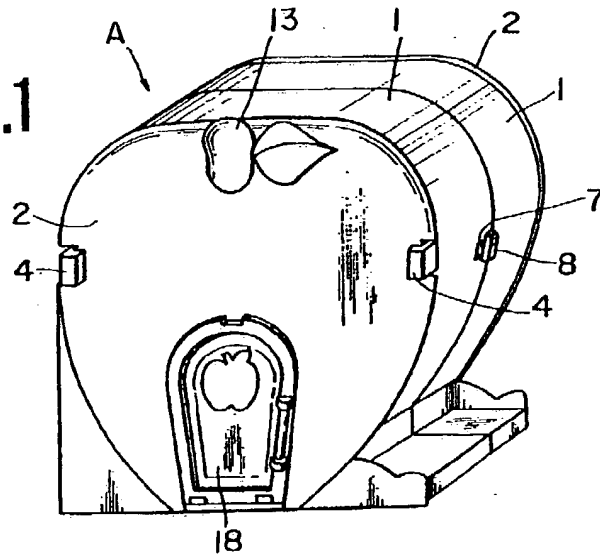


FIG. 2

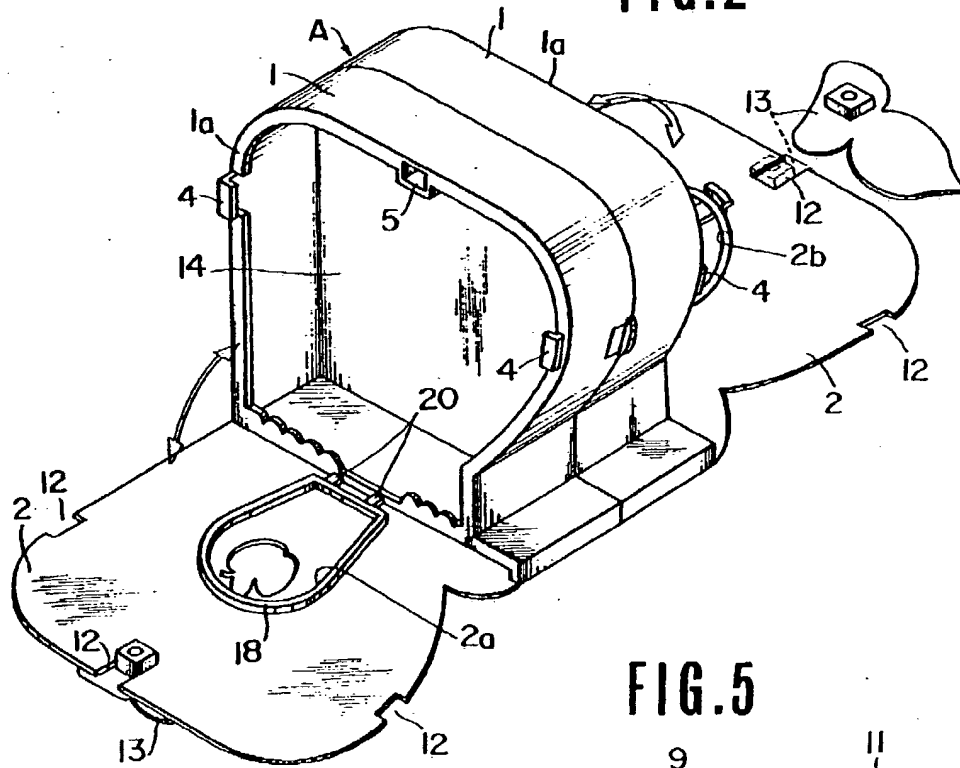


FIG. 5

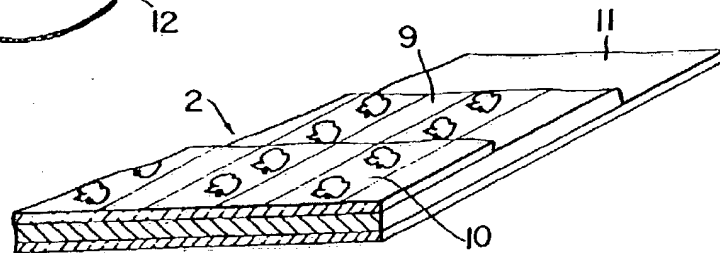


FIG. 3

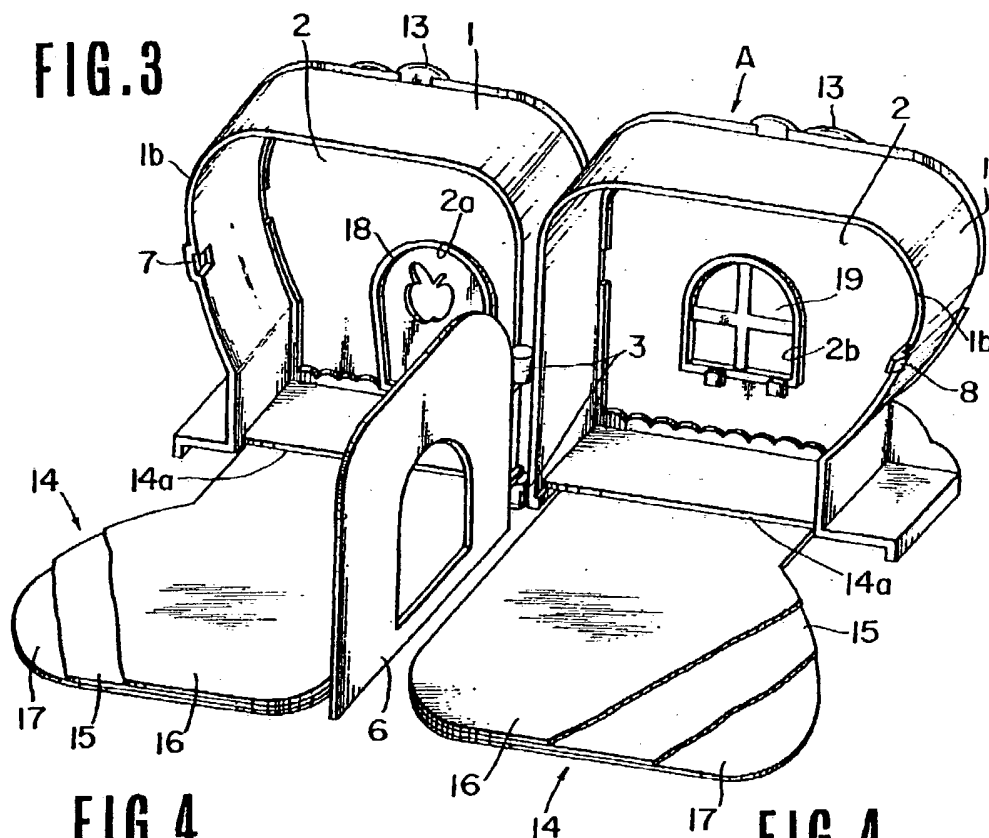


FIG. 4  
(a)

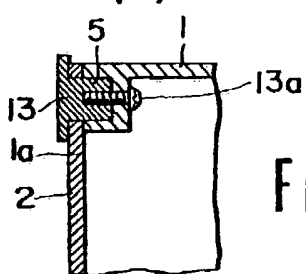


FIG. 4  
(c)

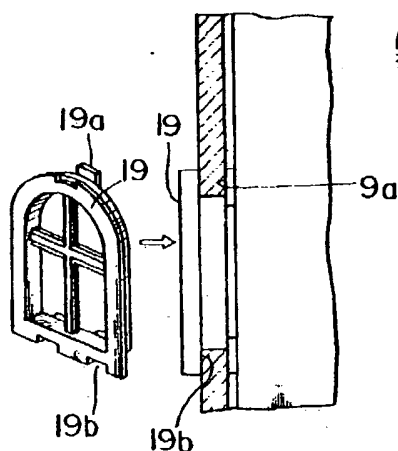
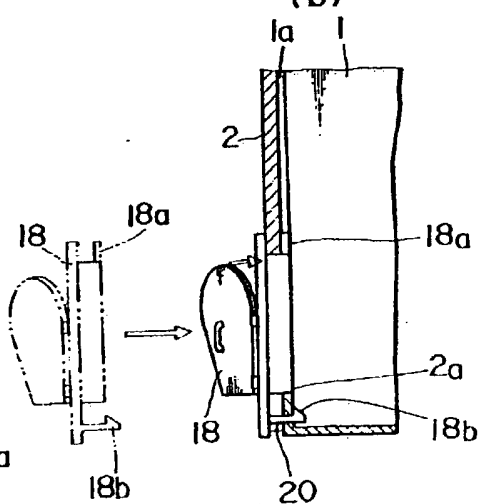


FIG. 4  
(b)



# SPECIFICATION Toy house

This invention relates to a toy house, and more particularly to a toy house which assumes a compact closed form providing a certain particular appearance, such as that of an apple or strawberry, when it is not used and provides a dreamy and fantastic toy house or doll's house when it is opened and developed for use.

In general, conventional toy houses of this kind are made of rigid plastics for retaining its shape. However, the rigid plastics cannot directly be applied with printing and therefore the decorations on the toy house are accomplished generally by attaching various printed papers onto the rigid materials with adhesives. This kind of decoration is not attractive but rather dull and cannot provide some dreamy feeling to little girls who play with the toy.

In this connection, it has been proposed to provide a toy house which is formed of a frame of rigid plastics and decorative panels made of plastic laminates prepared by welding non-rigid plastic sheets and cardboard sandwiched between the sheets. These decorative panels are soft to the touch, provide soft outline and are capable of being applied with printing to impart fantastic or fanciful appearance to the toy. However, it is rather difficult to connect the non-rigid decorative panels to the rigid frame and, therefore, the connection between the panel and the frame has been accomplished by riveting in such a manner that a rivet hole is provided in the panel and a rivet-receiving member is provided on the frame so as to apply the rivet from the outside of the panel and fix the rivet in the rivet-receiving member. According to this method, the head portion of the rivet is exposed to the outside of the panel, which badly spoils the appearance of the toy house. In this connection, it is to be noted that the appearance is one of the most important factors in the toy house because, if the image thereof is marred by some defect in the appearance, this has a fatal influence on the sale. By this reason, it has been desired to improve the appearance of the toy house in relation to the method of interconnecting the panel and the frame.

It is therefore an object of the present invention to provide a toy house which assumes a compact, closed form having an attractive appearance such as that of an apple, strawberry, etc., when it is not in use and can be opened or developed for use to provide a fantastic toy house and which is formed of a frame of rigid plastics and decorative panels of decorative plastic laminates made by welding of non-rigid plastic sheets and cardboard, which panels are connected to the frame without spoiling the appearance of the toy.

In accordance with the present invention, a toy house comprises a body made of a rigid plastics material and comprised of two frame members which are connected to each other by hinge means and openable into a developed position for use; said frame members each having a space inside thereof to form a room; decorative panels attached to the

outer end faces of the respective frame members; and floor members fixed at the base portions thereof to the corresponding frame members, respectively; said floor members each being made of a decorative plastic laminate and foldable so as to be folded upwardly into the respective frame members when the frame members are closed and extendable to form floors when the frame members are opened.

The decorative panels attached to the respective frame member provide a wall of the toy house. These decorative panels are preferably made of non-rigid plastics and bear printing on the respective sides thereof. The attachment of the decorative panel to the frame member is accomplished in a specific manner in which the decorative panel is fixed to the frame member by a screw means concealed from the outside by a decorative cover member.

The invention is further described, by way of example, with reference to the accompanying drawings, in which:

Fig. 1 is a perspective view of one form of a toy house according to the present invention;

Fig. 2 is a perspective view of the toy house of Fig. 1 with decorative panels disengaged from corresponding frame members;

Fig. 3 is a perspective view of the toy house of Fig. 1, shown in its opened or developed state;

Figs. 4(a), (b) and (c) are fragmentary, partly sectional views of connections between the decorative panel and the frame member and other structural elements of the toy house made of rigid plastics; and

Fig. 5 is a fragmentary enlarged sectional view of the decorative panel.

Referring now to the drawings, there is illustrated one embodiment of the present invention.

In the drawings, A designates one embodiment of a toy house according to the present invention which comprises frame members 1, 1 having a general contour of some attractive object, such as an apple, strawberry or the like, and decorative panels 2, 2 having prints which provide, for example, appearances of said object. The inside of each of the frame members 1, 1 has a space which constitutes a room of the toy house as will be described hereinafter.

The frame members 1, 1 are made of rigid plastics and formed in substantially symmetrical configurations relative to each other. The frame members 1, 1 are openably connected to each other through hinge portions 3, 3. Each of the frame members 1, 1 has, on the outer end face 1b, 1b thereof, hook members 4, 4 at opposite side portions thereof and a screw-receiving hole 5 at an upper portion thereof. Numeral 6 designates a partition which is connected to the frame members 1, 1 by the hinge portions 3, 3 and adapted to be rotatably positioned into a position as shown in Fig. 3 so as to define rooms in co-operation with the respective frame members 1, 1 when the frame members 1, 1 are opened. Numeral 7 is a hook-receiving hole and 8 is a hook. The hook-receiving hole 7 is formed on the inner end face 1b of either

one of the frame members 1, 1 and the hook 8 is provided on the inner end face 1b of the other frame member 1 so that the hook 8 is locked in the hook-receiving hole 7 to positively hold the members in the closed positions when the frame members 1, 1 are closed.

The decorative panels 2, 2 which are attached to the outer end faces of the respective frame members 1, 1 are decorative plastic laminates made of cardboard 9 and non-rigid plastic sheets 10 and 11 which are on the opposite surfaces of the cardboard 9, respectively, so as to sandwich the cardboard 9 therebetween and welded into an integral laminate as shown in Fig. 5. The cardboard 9 has, on one side thereof which is used as an inner wall of the room, a print, such as of an interior of the room, and the non-rigid plastic sheet 10 placed on said side of the cardboard is a transparent sheet so as to allow the print on the cardboard 9 to be seen. The other non-rigid plastic sheet 11 has a print applied directly thereto. Each of the decorative panels 2, 2 has cutouts 12, 12 at positions corresponding to the screw-receiving hole 5 and the hook members 4, 4 provided on the outer end face of the respective frame member 1, 1. One of the decorative panels 2, 2 has, at its central portion, an opening 2a for fitting a door member therein and the other decorative panel 2 has, at a central portion thereof, an opening 2b for fixing a window member therein. A panel holder 13 having a contour, of, for example, a stem of an apple when the frame member is generally formed in a contour of an apple, and a screw 13a are used to connect the panel 2 to the frame member 1 as will be described in detail later. Floor members 14, 14, each constituting a floor of the respective room of the toy house, are also made of a decorative plastic laminate formed by welding together of a cardboard 15 and non-rigid plastic sheets 16 and 17 similar to the laminate of the decorative panel 2. The cardboard 15 has a print on one side thereof and the sheet 16 placed thereon is transparent. Another sheet 17 bears thereon a print. The print applied on the cardboard 15 may be of a carpet or of a tiled floor according to the designs of the rooms formed by the frame members 1, 1. Each of the floor members 14, 14 is connected to the bottom of the corresponding frame member 1, 1 through a bendable portion or hinge 14a so as to be unfolded or developed to provide a floor for the toy house in use and so as to be folded into the inside of the respective frame member 1, 1 when the frame members 1, 1 are closed. In the embodiment as illustrated, the floor members 14, 14 are integrally formed with the corresponding decorative panels 2, 2 respectively, so that each of the integral laminates extends through the upper end of the decorative panel 2 to the tip end of the floor member 14 and the central portion of the laminate is fixed to the bottom of the frame member 1 for example by an adhesive, such as a double-sided adhesive-coated tape. However, the panel 2 may alternatively be formed separately from the floor member 14. In this case, the panel 2 and the floor member 14 are fixed to the bottom of the frame member 1 separately in such a manner that the free portions of the panel 2 and the

floor member 14 may be bent to rise from the bottom or folded upwardly.

A door member 18 of the toy house and a window member 19 thereof, are made of rigid plastics. The door member 18 has an engaging portion 18a and engaging hooks 18b at upper and lower portions of the door members 18, respectively, and similarly the window member 19 has engaging portions 19a and 19b at the upper and lower portions of the window member 19, respectively.

To attach the decorative panels 2, 2 to the frame members 1, 1 respectively, the panels 2, 2 are abutted against the corresponding outer end faces 1a, 1a of the frame members 1, 1 and press-fitted to be engaged with the hook members 4, 4. Then, the panel holder 13 is fitted into the cutout 12 formed at the upper portion of the decorative panel 2 so that a projection formed at the back of the holder 13 and provided with a threaded inner face is inserted into the screw-receiving hole 5. The screw 13a is then driven into the threaded projection of the holder 13 from the inside of the frame member 1 to fix the decorative panel 2 to the frame member 1 as illustrated in Fig. 4(a). Thus, the head portion of the screw 13a is located inside of the frame member 1 and cannot be seen from the outside of the toy house A, and the shank portion of the screw 13a is concealed by the panel holder 13 without being exposed to the outside. The appearance of the toy house A is thus not spoiled by the fixing members.

To fix the door member 18 into the lower opening 2a of the decorative panel 2, the upper engaging portion 18a is first engaged with the periphery of the opening 2a and the lower engaging hooks 18b, 18b are engaged with holes 20, 20 formed at the lower portions of the frame member 1. Thus, the door member 18 is firmly fixed to the decorative panel 2 and the frame member 1. The door member 18 has a door portion which is capable of being opened and closed.

Similarly, to fix the window member 19 to the decorative panel 2, the engaging portions 19a and 19b are press-fitted into the opening 2b from the outside of the decorative panel 2 to engage the periphery thereof.

With the arrangement as described above, the toy house of the present invention is used or played with in such a manner that the hook 8 is first depressed to release the lock thereof to allow the frame members 1, 1 to be opened into the position as shown in Fig. 3. In this position, the partition 6 is swung into a position between the frame members 1, 1 to define rooms in co-operation with the frame members 1, 1. The floor members 14, 14 are then lowered to form floors of the respective rooms of the toy house. If desired, any suitable toy furniture may be located in the respective rooms.

To tidy away the toy house, the floor members 14, 14 are folded upwardly into the respective frame members 1, 1 and the frame members are then rotated around the hinge portion 3, 3 so as to be closed. In the closed position, the hook 8 is again engaged with the hole 7 to maintain the closed state. In this state, the partition 6 is located between the floor members 14, 14.

Although the panel holder 13 has a threaded inner face so as to be engaged by the screw 13a in the illustrated embodiment, the screw receiving hole 5 may alternatively have a threaded inner face and the panel holder 13 may have a screw portion so as to be directly engaged with the threaded hole 5.

- As described above, according to the present invention, non-rigid materials can be combined with the rigid material without any difficulty and without spoiling the appearance, so that desired materials can be used for desired portions of the toy, enhancing the appearance and the image of the toy.

#### CLAIMS

1. A toy house comprising a body made of a rigid plastics material and comprised of two frame members which are connected to each other by hinge means and openable into a developed position for use; said frame members each having a space inside thereof to form a room; decorative panels attached to the outer end faces of the respective frame members; and floor members fixed at the base portions thereof to the corresponding frame members, respectively; said floor members each being made of a decorative plastic laminate and foldable so as to be folded upwardly into the respective frame members when the frame members are closed and extendable to form floors when the frame members are opened.

2. A toy house as claimed in claim 1, wherein each of the frame members has a hole for receiving a screw and hook members on the respective outer end face thereof, and wherein each of the decorative panels has cutouts and a panel holder with a

- threaded inner face, so that the hook members of the frame members are engaged with the corresponding cutouts of the decorative panel, the panel holder is fitted to the corresponding cutouts and fitted into the screw-receiving hole of the frame member and a screw is inserted into the hole and driven into the threaded inner face of the holder from the inside of the frame member to fix the decorative panel to the frame member.

3. A toy house as claimed in claim 1 or 2, wherein the decorative panels are each made of a decorative plastic laminate having prints on at least one surface thereof.

4. A toy house as claimed in claim 1, 2 or 3, wherein the body has a general contour of an apple and the decorative panel has, at its outer face, a print providing an appearance associated with the apple.

5. A toy house as claimed in claim 1, 2 or 3, wherein the body has a general contour of a strawberry, and the decorative panel has at its outer face a print providing an appearance associated with the strawberry.

6. A toy house as claimed in any of claims 1 to 5, wherein one of the decorative panels has an opening for mounting a door member therein and another decorative panel has an opening for mounting a window member therein.

7. A toy house as claimed in any of claims 1 to 6, wherein the decorative panel is formed integrally with the floor member and the central portion thereof is fixed to the bottom of the frame member.

8. A toy house constructed substantially as hereinbefore described with reference to and as illustrated in the accompanying drawings.